MA201 COURSE WEBSITE

Course Information

Instructor Contact Information

Instructor Name	Section Number	Email Address	Office Hours	Mathskeller Hours
Dr. David Royster	MA 201 Course Coordinator	david.royster@uky.edu		
Mr. Jamison Wallace	Section 001 CB 343 8:00-9:15 am	Jamison.Wallace@uky.edu		
Mr. Jamison Wallace	Section 002 CB 343 9:30 - 10:45 am	Jamison.Wallace@uky.edu		
Mr. Ryan Rogers	Section 003 CB 343 11:00 - 12:15 pm	<u>RyanJ.Rogers@uky.edu</u>		
Mr. Ryan Rogers	Section 004 CB 343 12:30 - 1:45 pm	<u>RyanJ.Rogers@uky.edu</u>		

CAUTION

This syllabus covers all four sections of MA 201. Your instructor may have additional information to share on such things as an attendance policy, excused absences, participation requirements and the like. Please pay careful attention to this syllabus AND that of your instructor.

Textbook

Mathematics for Elementary Teachers eText -- MyMathLab Access, Sybilla Beckmann, 5th Edition ISBN: 9780134751689

Assessment Table

Final averages will be computed by the following table, which lists tentative dates:

Assignment Description	Percentage of Final Grade	
Course Engagement	10%	Due Each Day of Lecture
Homework Assignments	15%	Schedule Listed Below
Project 1	15%	Due Oct 13, 2022
Project 2	15%	Due Nov 22, 2022
Exam I	10%	Due Sept 22, 2022
Exam II	10%	Due Oct 19, 2022
Exam III	10%	Due Nov 16, 2022
Final Exam	15%	Section 001 Thursday, Dec 15, 2022 8:00 am - 10:00 am
		Section 002 Tuesday, Dec 13, 2022 8:00 am - 10:00 am
		Section 003 Thursday, Dec 15, 2022 10:30 am - 12:30 pm
		Section 004

https://www.ms.uky.edu/~ma201/index.html

Tuesday, Dec
13, 2022
10:30 am -
12:30 pm

Your final grade is a letter grade A, B, C, D, or E. It is computed from several components (as indicated in the table above).

Letter Grade	Final Course Average
А	90.00-100.00
В	80.00-89.99
С	70.00-79.99
D	60.00-69.99
E	0.00-59.99

A **midterm grade** in this course is a snapshot indicating how a student is performing academically in MA 201. Although these grades will not be reflected on a student's transcript, students should use this grade as helpful feedback towards their progression in the course. Midterm grades will reflect all assignments submitted by 11:59 pm on October 24th, using the following table:

Assignment Description	Percentage of Midterm Grade
Course Engagement	16%
Homework Assignments	26%
Project 1	26%
Exam I	16%
Exam II	16%

Course Objectives Student Learning Outcomes

- Establish, describe, and evaluate the use of tactile learning manipulatives in elementary level mathematics to model operations, algorithms, and sets.
- Justify the use of our numeration system by comparing it to other bases, and describe the development of our system and its properites as it expands from the set of natural numbers to the set of real numbers.

- Demonstrate mastery of basic computatoinal skills and recognize the appropriate use of manipulatives to enhance those skills.
- Perform standard and alternative algorithms for addition, subtraction, multiplication and division of integers, fractions and decimals.
- Disucss relationships between numbers involving the divisors, multiples and factoring of the numbers.
- Demonstrate the use of mathematical resoning by justifying and generalizing patterns and relationships.
- Solve open-ended elementary school problems in areas such as patterns, arithmetic, ratios, and negative numbers.

UK Mathematics Department Professional Themes

This course will address the four themes of the conceptual framework for the UK professional education program: **research, reflection, learning,** and **leading**. Students engage will engage with fundamental ideas in mathematical *research, reflecting* on and analyzing core mathematical content that arises throughout mathematics at all levels. Students will develop as life-long mathematical *learners* who will be able to take active *leadership* roles in their future roles as professionals and citizens. The ultimate goal in addressing these four themes is to produce teacher leaders who work together to improve student learning among diverse populations and improve education in Kentucky and beyond.

Unbridled Learning Initiatives and the Kentucky Core Academic Standards

This course will provide students an opportunity to advance their knowledge and mastery of the "tools" associated with Kentucky education reform, focusing on the content and practice standards outlined in the Kentucky Core Academic Standards. As students carry out projects and complete assignments that involve mathematical content underlying instructional activities for P-12 students in Kentucky schools, they will address one or more components of the Unbridled Learning initiatives.

Attendance Expectations

While attendance will not contribute directly to your grade, students will be expected to engage in the course fully each day of class. If a student needs to be absent from class, it is the responsibility of the student to inform their instructor within a week of the date of absence to make arrangements for any missed assignments and lecture material. Although the university's list of excused absences can be found here, any additional reasons of absence (such as COVID quarantine, childcare needs, mental health concerns, etc.) may be excused at the discretion of the instructor.

Students will have one week to inform their instructor of an absence and request an extension on any missed assignments. If you miss an assignment or day of class for any reason, all assignments missed on the date of absence will be reopened and due on the date set by the instructor (within three days of the student's notification).

In the event of **snow**, or other inclement weather conditions that prevent in-person class meetings, all class sessions will be moved online until it safe to return to in-person meetings. No classes will be cancelled this semester without extreme circumstances.

Missing lecture?

If you miss a day of lecture (regardless of the reason), you will need to email your instructor within one week to request a copy of the lecture notes covered during class and a copy of the "Course Engagement" assignment given. Course engagement measures a continued commitment to engaged, active participation in course material. Written expectations for these assignments will be provided by your instructor on your Canvas page.

Need an extension on homework?

All homework assignments that are due within a unit will open on the first day of that unit and at least one assignment due date will occur each week of the unit. A student may request up to **three**, 24-hour homework assignment extensions with no questions asked. A student may receive more time on an extended assignment if they have communicated and received permission from their instructor.

August 2022

Assignment Title

Assignment Due Date

August 29, 2022 Practice Problems: 1.1 -1.4

September 2022

Assignment Due Date	Assignment Title
September 7, 2022	Practice Problems: 2.1 - 2.3
September 12, 2022	Practice Problems: 2.4 - 3.2
September 19, 2022	Practice Problems: 3.3 - 3.5
September 21, 2022	Unit 1 Practice Exam

October 2022

Assignment Due Date	Assignment Title
October 3, 2022	Practice Problems: 4.1 - 4.3
October 10, 2022	Practice Problems: 4.4 - 5.2
October 17, 2022	Practice Problems: 5.3 - 5.4
October 19, 2022	Unit 2 Practice Exam
October 31, 2022	Practice Problems: 6.1 - 6.6

November 2022

Assignment Due Date	Assignment Title
November 7, 2022	Practice Problems: 7.1 - 7.5
November 14, 2022	Practice Problems: 7.6
November 16, 2022	Unit 3 Practice Exam

December 2022

Assignment Due Date	Assignment Title
December 5, 2022	Practice Problems: 8.1 - 8.4
December 7, 2022	Practice Problems: 8.5 - 8.6
December 7, 2022	Final Practice Exam

Need to reschedule an exam?

All exams will be available from 8:00 am until 11:59 pm on the date listed in the table under the "Schedule" section below. If a student isn't able to submit their exam on the due date, they should contact their instructor as soon as possible to arrange another time and date to take their exam. Students must notify their instructor within a week of their absence if they would like an opportunity to reschedule their exam.

TESTS

All exams will be available from 8:00 am until 11:59 pm on the date listed in the table under the "Schedule" section below. Exams can be accessed through a passwordprotected MyLab assignment. Students will not be allowed to collaborate with other students, seek online help, nor use class notes during the exam. Students are expected to work individually on these assignments.

Study Guide

Each exam will have a study guide assignment posted in MyLab one week before the exam. Students should use these study guides as a resource of additional practice problems that will help you prepare for your exams. Similar questions to those in the course lecture notes, homework assignments, and study guides will be placed on the exam. To utilize the study guides to their fullest potential, students should read and answer each problem thoroughly. These study guides are **not** graded coursework but will provide another resource students can use to be successful in the course.

Practice Exam

The last graded homework assignment due before an exam is called the "Practice Exam." These assignments are available for students to prepare for the level of difficulty and the length of exams in the course. The best way to use this resource is to study the unit's material, create an environment like that of an exam, and complete the assignment within 75 minutes (the length of a typical exam). Once you have completed one attempt on each question go back to any missed questions and reattempt those problems. This will help you practice the material and a realistic pace for each question.

SCHEDULE Table of Topics

Class Session Date

Course Topic

August 23, 2022

Counting, Decimals, and Negative Numbers

August 25, 2022	Comparing Numbers, Decimals, Between Decimals, and Rounding
August 30, 2022	Introduction to Fractions
September 1, 2022	Equivalent Fractions
September 6, 2022	Comparing Fractions and Percentages
September 8, 2022	Addition and Subtraction: Language, Writing Good Problems, Mental Math
September 13, 2022	Addition and Subtraction: Algorithms and Fractions
September 15, 2022	Addition and Subtraction: Negative Numbers
September 20, 2022	Exam 1 Review
September 22, 2022	Exam 1: No New Material
September 27, 2022	Multiplication: Structure and Writing Good Problems
September 29, 2022	Multiplication: Commutative and Associative Properties, Area and Volume
October 4, 2022	Multiplication: Distributive Property, Properties of Arithmetic, and Mental Math
October 4, 2022 October 6, 2022	Multiplication: Distributive Property, Properties of Arithmetic, and Mental Math Multiplication: Extending to Fractions and Decimals
October 4, 2022 October 6, 2022 October 11, 2022	 Multiplication: Distributive Property, Properties of Arithmetic, and Mental Math Multiplication: Extending to Fractions and Decimals Multiplication: Extending to Negative Numbers and Scientific Notation
October 4, 2022 October 6, 2022 October 11, 2022 October 13, 2022	Multiplication: Distributive Property, Properties of Arithmetic, and Mental Math Multiplication: Extending to Fractions and Decimals Multiplication: Extending to Negative Numbers and Scientific Notation Project Work Day Project 1 Due
October 4, 2022 October 6, 2022 October 11, 2022 October 13, 2022 October 18, 2022	Multiplication: Distributive Property, Properties of Arithmetic, and Mental Math Multiplication: Extending to Fractions and Decimals Multiplication: Extending to Negative Numbers and Scientific Notation Project Work Day Project 1 Due Exam 2 Review
October 4, 2022 October 6, 2022 October 11, 2022 October 13, 2022 October 18, 2022 October 20, 2022	Multiplication: Distributive Property, Properties of Arithmetic, and Mental Math Multiplication: Extending to Fractions and Decimals Multiplication: Extending to Negative Numbers and Scientific Notation Project Work Day Project 1 Due Exam 2 Review Exam 2: No New Material
October 4, 2022 October 6, 2022 October 11, 2022 October 13, 2022 October 18, 2022 October 20, 2022	Multiplication: Distributive Property, Properties of Arithmetic, and Mental Math Multiplication: Extending to Fractions and Decimals Multiplication: Extending to Negative Numbers and Scientific Notation Project Work Day Project 1 Due Exam 2 Review Exam 2: No New Material Division: Word Problems, Fractions, and Remainders, Algorithms and How They Work
October 4, 2022 October 6, 2022 October 11, 2022 October 13, 2022 October 18, 2022 October 20, 2022 October 27, 2022	Multiplication: Distributive Property, Properties of Arithmetic, and Mental Math Multiplication: Extending to Fractions and Decimals Multiplication: Extending to Negative Numbers and Scientific Notation Project Work Day Project 1 Due Exam 2 Review Exam 2: No New Material Division: Word Problems, Fractions, and Remainders, Algorithms and How They Work Division: Equivalent Problems, Fractions, and Decimals
October 4, 2022 October 6, 2022 October 11, 2022 October 13, 2022 October 18, 2022 October 20, 2022 November 1, 2022	Multiplication: Distributive Property, Properties of Arithmetic, and Mental Math Multiplication: Extending to Fractions and Decimals Multiplication: Extending to Negative Numbers and Scientific Notation Project Work Day Project 1 Due Exam 2 Review Exam 2: No New Material Division: Word Problems, Fractions, and Remainders, Algorithms and How They Work Division: Equivalent Problems, Fractions, and Decimals Ratio and Proportion Problems using Multiplicative and Division

	Inversely Proportional
November 10, 2022	Change in Percentages: Increasing and Decreasing
November 15, 2022	Exam 3 Review
November 17, 2022	Exam 3: No New Material
November 22, 2022	Project Work Day: Project 2 Due
November 29, 2022	Factors, Multiples, Evens, and Odds
December 1, 2022	Divisibility Tests, Prime Numbers, GCF, and LCM
December 6, 2022	Rationals and Irrationals, Terminating and Repeating Decimals as Fractions
Section 001: Thursday, Dec 15, 2022 8:00 am – 10:00 am Section 002: Tuesday, Dec 13, 2022 8:00 am – 10:00 am Section 003: Thursday, Dec 15, 2022 10:30 am - 12:30 pm	Final Exam
Section 004: Tuesday, Dec 13, 2022 10:30 am - 12:30 pm	

Homework Due Dates

Homework must be submitted online in MyLab, accessed through your Canvas course. **All assignments are due by 11:59 pm on the date listed below.** Each question has five possible attempts. Each student is responsible for submitting the assignment in a way and time that the server will accept. Internet outages, different clocks, and other technical difficulties that occur after 11:00 pm on the due date are at your own risk. Homework assignments are available at the beginning of each unit and will have their individual due dates listed on each assignment. Students will have the opportunity to work ahead on homework sets. The schedule for homework sets can be found in the table below. Note that a few of these assignments are due during Prep Week.

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Assignment Due Date

August 29, 2022

Assignment Title Practice Problems: 1.1 - 1.4

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Assignment Due Date	Assignment Title
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October 10, 2022	Practice Problems: 4.4 - 5.2
October 17, 2022	Practice Problems: 5.3 - 5.4
October 19, 2022	Unit 2 Practice Exam
October 31, 2022	Practice Problems: 6.1 - 6.6

November 2022

Assignment Due Date	
November 7, 2022	Pract
November 14, 2022	Pra
November 16, 2022	U

Assignment Title Practice Problems: 7.1 - 7.5 Practice Problems: 7.6 Unit 3 Practice Exam

December 2022

Assignment Due Date	Assignment Title
December 5, 2022	Practice Problems: 8.1 - 8.4
December 7, 2022	Practice Problems: 8.5 - 8.6
December 7, 2022	Final Practice Exam

KY Standards

During the semester, we will be exploring the course material through the textbook as well as the <u>Kentucky Academic Standards for Mathematics</u>. Instructors will refer to these standards throughout their lectures and students will be assigned a standard from this document to center their project around. For more information regarding the requirements for the project, please visit your section's Canvas course page.

EXTRA COURSE INFORMATION DRC Letters

The Disability Resource Center provides services to the university community so student with disabilities have an equal opportunity to fully participate in all aspects of university life. Students can register with the DRC at any time. The DRC consultants will meet with students one-on-one to discuss his, her, or their needs and how to be success at UKY. This may result in the student receiving accommodation letters, accommodated test-taking services, alternative text services, community resource linkage, captioning and interpreting services into the workforce. If you would like to apply for any of these services, please visit the DRC's website.

If you have received a letter from the DRC, please upload a copy for your instructor to the *"DRC Letters"* dropbox under the *"Assignments"* tab on your Canvas course page.

For more information about the DRC and academic accommodations please visit <u>the</u> <u>DRC's homepage</u>.

Athletic Letters

If you are an athlete and will be traveling in the Fall 2022 semester, please upload a copy of the letter received from the Athletics Department for your instructor to the *"Athletic Travel Letters"* dropbox under the *"Assignments"* tab on your Canvas course page.

Non-discrimination Policies

The University of Kentucky faculty are committed to supporting students and upholding the University's non-discrimination policy. Discrimination is prohibited at UK. If you experience an incident of discrimination we encourage you to report it to Institutional Equity & Equal Opportunity (IEEO) Office, 13 Main Building, (859) 257-8927.

Acts of Sex- and Gender-Based Discrimination or Interpersonal Violence: If you experience an incident of sex- or gender-based discrimination or interpersonal violence, we encourage you to report it. While you may talk to a faculty member or TA/RA/UA, understand that these individuals MUST report any acts of violence (including verbal bullying and sexual harassment) to the University's Title IX Coordinator in the IEEO Office. If you would like to speak with someone who may be able to afford you confidentiality, the <u>Violence Intervention and Prevention (VIP) program</u> and <u>Bias Inciden</u> <u>Support Services</u> (Frazee Hall Lower Level), the <u>Counseling Center</u> (106 Frazee Hall), an<u>University Health Services</u> are confidential resources on campus.

Please visit the following links to view the <u>university's statement on diversity, equity, and</u> inclusion (DEI) and to view other resources available to you

Academic Integrity

All assignments, exams, quizzes, projects, and exercises completed by students for this class should be the product of the personal efforts of the individual(s) whose name(s) appear on the corresponding assignment. Students are encouraged to collaborate with one another on homework assignments and daily course engagement activities. However, students should work independently to complete project and exam requirements. Any evidence of plagiarism will be investigated and a meeting between the instructor and each student will be arranged within a week of the submitted assignment. If you would like the course coordinator to attend the meeting please email him and include a description of your situation along with the time and date of your meeting.

For more information about the university's policies regarding plagiarism and cheating please visit the following sites: <u>University Senate Rules</u> and <u>Academic Ombud</u>.

Miscellaneous Information

The last day to add is Friday, August 26 The last day to drop is Friday, September 9, The last day to withdraw is Wednesday, November 2. No withdrawals will be granted after this point unless there are extreme circumstances. The last day of class is Wednesday, December 7. Prep Days begin Monday, December 5 and will last until Wednesday, December 7. Reading Days begin Thursday, December 8 and will last until Friday, December 9.